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DEPARTMENT OF AGRICULTURE.

ALBUM
OF
AGRICULTURAL GRAPHICS.

VALUES PER ACRE OF CROPS OF THE UNITED STATES.

BASED ON RESULTS OF INVESTIGATION UNDER THE DIRECTION OF THE STATISTICIAN.

PUBLISHED BY AUTHORITY OF THE SECRETARY OF AGRICULTURE.

WASHINGTON, D. C.
MDCCCXC.

Compliments of

J M Rusk

Secretary of Agriculture

DEPARTMENT OF AGRICULTURE.

ALBUM

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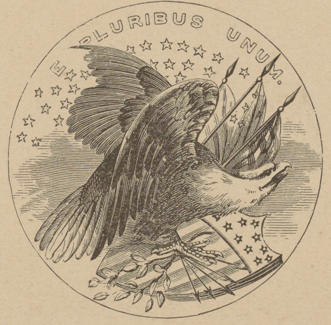


WASHINGTON, D. C.
MDCCCXC.

LETTER OF SUBMITTAL.

Department of Agriculture,
Office of the Statistician,
June 16, 1890.

Sir: The publication of the Album of Agricultural Statistics last year elicited the warmest expressions of popular appreciation from teachers in educational institutions of all grades, directors of Farmers' Institutes, and the intelligent public generally. The subjects selected were recognized as of paramount importance and suited to the methods of illustration adopted, which were direct and simple and well calculated to afford a clear and distinct understanding, avoiding the common defect of confused and involved ideas in graphic illustration.

The present issue, entitled an Album of Agricultural Graphics, presents the important topic of values per acre, on the basis of average farm value, as reported on the first of December for each year.

The values of crops in any single year would not be just as a record of comparative values, because of the great variation in quantity from year to year; therefore the average of ten consecutive years is made the basis of comparison, securing an absolutely fair result, for which no data can be found except in the annual estimates of values of farm products of this Department, which are accepted as the most accurate and reliable of the work of our crop reporters.

The series includes ten maps, each illustrating values of a single crop, by States, the whole comprising the entire list of farm products for which annual estimates in detail of area and rate of yield and value have been made. The following is the

LIST OF ILLUSTRATIONS.

I. Corn, values and yields per acre.
II. Wheat, values and yields per acre.
III. Oats, values and yields per acre.
IV. Rye, values and yields per acre.
V. Barley, values and yields per acre.
VI. Buckwheat, values and yields per acre.
VII. Potatoes, values and yields per acre.
VIII. Tobacco, values and yields per acre.
IX. Cotton, values and yields per acre.
X. Hay, values and yields per acre.

In this plan of illustration the main idea, that of value, is presented geographically in an outline map of the United States, the differentiation being shown both by the density of color and distinct peculiarity of mechanical drawing, by groups of States, while the differences within these groups are seen in the table of State averages on the margin. As a prominent element of value per acre, the yield per acre is conspicuously indicated on the field of each State, as well as in the marginal table. Of course, the other element is value per unit of quantity, which is in some crops almost as important as rate of yield.

The economic suggestion in the facts illustrated is rich and of highly practical value to the American farmer. It may prove useful as well as interesting to inquire why an acre of corn is worth four times as much in one State as in another, an acre of wheat three times as much, and an acre of oats twice as much. It may also be worth inquiry why the average yield of corn per acre for ten years is 32.7 bushels in New Hampshire, which possesses a granitic soil, which is so far removed in fertility from the ideal maize-bearing alluvium, and only 27.7 bushels in Illinois, which is endowed with extraordinary fertility. As price as well as yield is an element in value per acre, a luminous economic vista is opened by the inquiry why the price per bushel should be more for one bushel in one State than for three in another. Farmers will never be as prosperous as they should be until they act in the light of the knowledge derived from the solution of the problems involved in the differentiation of yield and price.

Hon. J. M. RUSK, *Secretary*.

J. R. DODGE, *Statistician*.

ALBUM OF AGRICULTURAL GRAPHICS.

VALUES PER ACRE OF FARM CROPS.

The geographical method is found convenient in this comparison of values per acre. Valuation by acre of cultivation, rather than by unit of measurement, is the more important consideration, practically and economically. There is far greater variation, in current agricultural practice, in the cost per bushel of product than in the cost per acre of cultivation and harvesting. The relation between superficial area and value of product is therefore vital and controlling, and is naturally selected as the main idea in the plan of illustration here adopted. The yield per acre, however, is the more important of the two elements which combine to make values, representing quantity of production, the other being, of course, value per unit of measurement. It is proper, therefore, that differences in State averages of yield should be prominently indicated. This is done in a manner that does not confuse in the least the two ideas of value by area and by quantity of product, the latter being an important factor in producing the value per acre. The average yield per acre of each State is shown in plain figures in a circle of color different from the main tint.

An examination of the national averages, of ten consecutive crops, shows a wide range of value per acre. Tobacco has the highest average, $61.51. That of potatoes is $38.34. Cotton, the third in order, drops to $15.69. Hay makes an average of $11.08. The cereals fall below $10 per acre, excepting only barley, which is not grown in sufficient quantity to meet the requirements of consumption, and averages $12.76 per acre, 28 per cent. more than the average of wheat for the same period. The average for corn is $9.47; that of rye $8.27; of buckwheat, $8.24; of oats, $8.16.

The cost of cultivation and harvesting is considerable in tobacco and in potatoes, yet the opportunity for larger net returns for superintendence and use of land is greater in the case of large gross returns per acre. Considering the cost of picking and ginning, as well as the labor of cultivation, the value of cotton per acre is not greatly in excess of that of cereals. The value of cereals suggests an excess of breadth cultivated and a minimum of labor in cultivation, which accounts for the low yields and small net profits. It indicates the fact that the era of intensive culture awaits the scarcity and appreciating value of fresh lands. The extremes in value per acre of corn are $24.32 and $6.19. Eighteen States and Territories average above $15. Half of these are east of the Alleghenies and north of Delaware; the other half on the Pacific Coast and in the Rocky Mountain region. In the former the cause is found in large yield and high prices, both the result of demand for consumption by a large proportion of the population engaged in non-agricultural industries. In the latter the climate is not so well suited to maize, and mining and manufacturing stimulate demand. Where prices are lowest there is either an excessive production or a very low rate of yield. It requires nearly four acres in South Carolina to equal the value of one in New Hampshire, though the soil of the former is inferior to that of the latter; and it requires more than three acres in Nebraska, which makes the highest average rate of yield, to produce the value of one in the Granite State. These diverse results depend far more upon inequalities in distribution of population, and especially in the ratio of consumers to producers, than upon climate or soil. In wheat and other cereals, potatoes, hay, and all farm products of general geographical distribution, similar differences are found to result from similar causes.

The tabulations of rate of yield per acre make the following averages for ten years, which are stated in connection with averages of value per acre:

	Value.	Yield.		Value.	Yield.
Corn........bush..	$9 47	24.1	Buckwheat.bush..	$8 24	12.8
Wheat...... " ..	9 95	12.0	Potatoes.... " ..	38 34	76.2
Oats........ " ..	8 16	26.6	Tobacco..pounds..	61 51	727.1
Rye......... " ..	8 27	11.9	Cotton...... " ..	15 69	168.1
Barley...... " ..	12 76	21.7	Hay.........tons..	11 08	1.19

The past decade has been marked by several years of drought, which have reduced the rate of yield below the average of the preceding decade, a period comparatively exempt from dry seasons. The years of sufficient rainfall show no diminution of rate of yield.

The value per acre of corn in the New England States ranges from $24.32 in New Hampshire to $20.94 in Connecticut—more than twice the general average. New York, New Jersey and Pennsylvania, producing far less than their consumption, are nearer the source of supply, reducing value to about $18 per acre. The Western mountain areas, in which corn is very sparsely grown on the lower elevations, require a supply from the Central States, increasing the cost, through freight and commissions, nearly to a level with values in the Middle States, the range of price depending upon accessibility of the local centers of consumption. In the Ohio Valley the State averages are somewhat higher than the national average, except in Illinois; and in the Missouri Valley, the region of commercial surplus, prices are necessarily lower than the general average. In Maryland and Virginia, and also in Arkansas, prices are slightly above the national average, but below it in all the other Southern States, the supply being nearly equal to requirements, grown on a superficially cultivated area of cheap lands and, therefore, at a low rate of yield. With increase of mining and manufacturing, prices per bushel and yields per acre will increase.

The higher values per acre in wheat are found in the Eastern States. Colorado, by reason of demand and rate of yield, makes an exceptionally high average. The Middle States and the Rocky Mountain districts generally make relatively high averages. The entire Northwest runs below the general average, and also the entire Cotton States, in the former case because of supply beyond consumption, and in the other because of low rate of yield. While the South has some climatic disadvantage in the production of cereals, there are soils and situations well adapted to production of winter grain in nearly every State, and especially in those having considerable areas above tide-water and elevations assuring a temperate climate. There is no difficulty in producing ample supplies of all the cereals throughout the South. The average rate of yield for the country, 12 bushels, is nearly the same as that of Europe. England, with a small acreage, has an average more than twice as large, while Russia, with a large breadth, averages scarcely two-thirds as much as the United States. As population shall increase, higher cultivation and soil enrichment will follow as a necessity. This result is beginning to be seen in the practice of the most progressive wheat growers, and is shown in the differences of State averages. Even the exceptional richness of the western prairies is fully offset by the fertilization and cultivation of relatively poor soils of the Atlantic Coast. In this way the wants of a population of more than 100,000,000 people should be met by a breadth of wheat no larger than that of the present year.

The range of value per acre of oats is from $18.15 in Nevada to $4.56 in North Carolina. In the South the crop can only be grown in winter, and the average yield is reduced by the custom of growing more for winter grazing than for seed. Very heavy yields are sometimes made in the lower latitudes, with proper selection of seed and soil and with favorable meteorological conditions. The principal breadth in oats is in the States of the Northern border. The plant requires a moderate temperature The first group producing the higher values per acre comprise Washington, Idaho, Colorado, Montana, Nevada, Massachusetts and New Hampshire. The increase in the area of oats has been extraordinary, the breadth doubling in little more than a decade. This is due to enlarged requirements for horse feeding, an exclusive ration of corn proving too stimulating in our climate, and to more extensive use for human food.

Rye is a crop for poor soils and is not much grown in this country. The first group has a range of value from $12.78 to $11.17, the lowest from $5.51 to $4.67. The average yield in the South is lower by reason of the fact that it is grown more for winter pasture than for seed.

Barley has a higher value per acre than any other cereal, the first group having a range of $20.47 to $17.43 per acre. The lowest has a value from $9.65 to $7.59 per acre. The highest value per acre is in Maryland, where the yield averages 25.5 bushels under fertilization and generally good cultivation. The highest average yield is 29.1 bushels in Washington. Still a large quantity is annually imported on account of the proximity of Canada to the great beer-manufacturing centers, and of the high malting quality of the Canada product. Its distribution is by no means general, as California, Wisconsin, Minnesota, and New York are the main factors of its production, producing half of the crop. Dakota, Iowa, and Nebraska contribute largely to the supply, the remaining States having scanty and scattered areas.

Buckwheat is by no means a general crop, the larger portion being grown in New York and Pennsylvania. The highest average value per acre is $15.69, in California.

The average value per acre of potatoes is $38.34, and the average yield 76.2 bushels. Like oats, the potato is adapted to cool climates of the higher latitudes. The range of yield is from 117 to 55 bushels, and the average value per acre from $76.25 to $30.49.

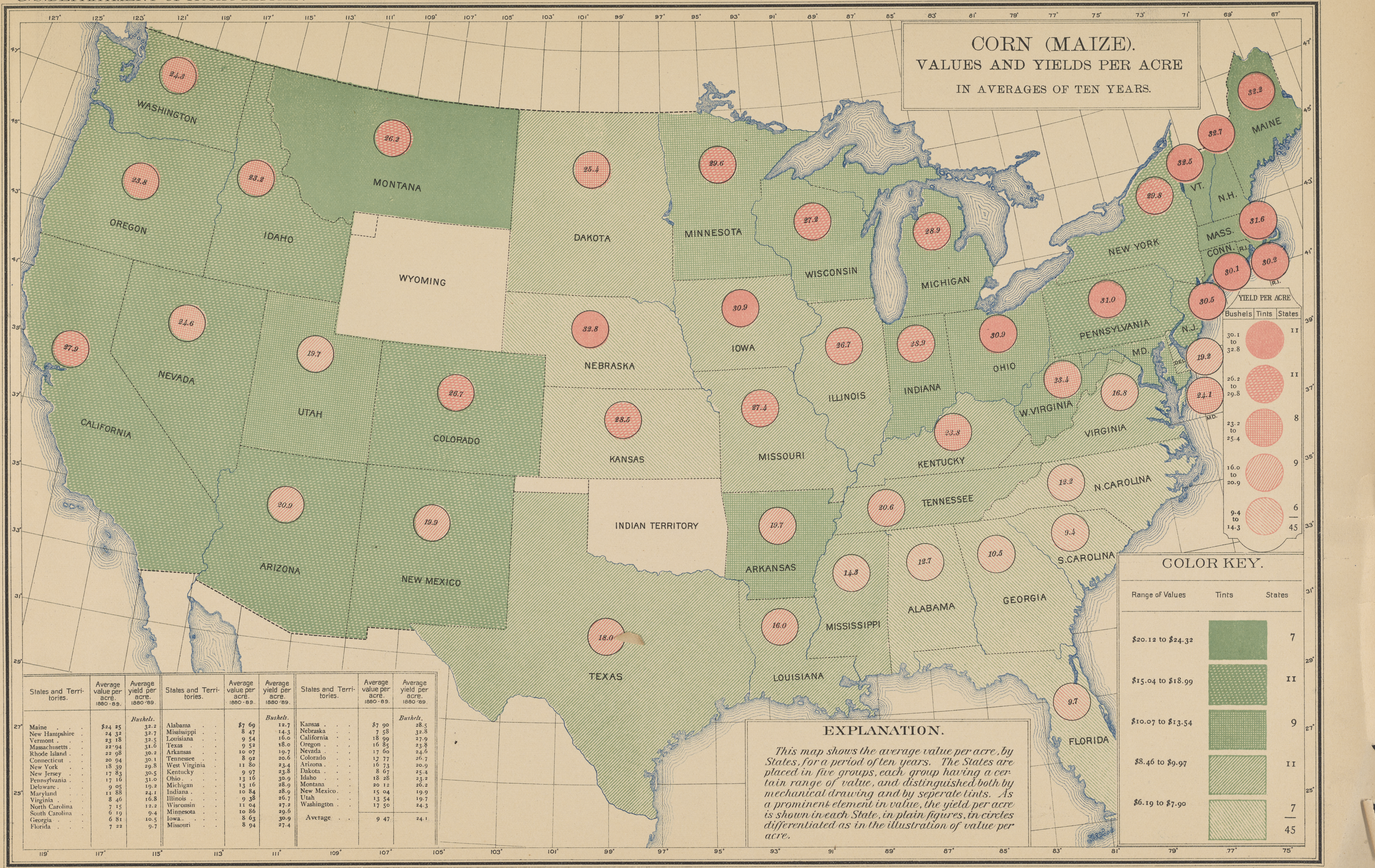
The value of tobacco per acre is relatively high, with a very wide range, from $204.28 to $44.24 per acre. The highest yields and prices per pound are for seed-leaf tobacco, used exclusively for cigars, and grown solely in the Northern States, and mainly in a few counties on the Connecticut River, three in New York, three in Pennsylvania, and in limited districts in Wisconsin and Ohio. The latter State also produces tobacco for manufacture of plug, fine-cut and other products, and averages a value of $66.28 per acre. Kentucky, the principal producer of manufacturing and shipping tobaccos, averages $58.63; Virginia, $44.85; Maryland, $44.24. North Carolina, famous for bright wrappers, has an average of $51.21.

The value of cotton per acre ran from $20.83 to $11.16. The yield per acre is highest in Louisiana, averaging 232.7 pounds of lint, and lowest in Florida, averaging 106.4 pounds, a part of which is sea-island cotton, which has a high relative value. Arkansas, Mississippi, Tennesse, and Texas follow Louisana in the order of value, while Louisana, Arkansas, Texas, Mississippi, and Tennessee follow in the order of yield. The cost of transportation, commissions and compressing, and other charges add materially to the value at the ports of exportation.

There is a great difference in the State values of hay. Massachusetts has naturally the highest average, $18.82 per acre, having the fewest numbers engaged in agriculture in proportion to the whole population, and therefore the largest relative demand. Nebraska has the smallest average value, $4.82, as large areas of grass are had for little more than the cost of cutting. It has been relatively high in the South, because grass has been deemed inimical to agriculture under the cotton regime, and not generally tolerated; but a marked change is progressing, which will greatly increase and may cheapen the product.

The yield per acre is an important element in value per acre, but not the only one. The price per pound or bushel also differs, owing to distance from market and local scarcity or abundance. The tendency of railroad extension is toward equalization of prices, yet the difference in State averages of price shows how great differentiation in price still exists. It naturally happens that where prices are low yields are also low from lack of inducement to high culture, intensifying the desparity in values per acre. A study of these differences may surprise the casual reader and may prove fruitful of practical suggestions if made with care and thoughtfulness.

CORN (MAIZE).
VALUES AND YIELDS PER ACRE
IN AVERAGES OF TEN YEARS.



States and Territories.	Average value per acre. 1880-89.	Average yield per acre. 1880-'89.	States and Territories.	Average value per acre. 1880-89.	Average yield per acre. 1880-'89.	States and Territories.	Average value per acre. 1880-89.	Average yield per acre. 1880-'89.
		Bushels.			*Bushels.*			*Bushels.*
Maine	$24 25	32.2	Alabama	$7 69	12.7	Kansas	$7 90	28.5
New Hampshire	24 32	32.7	Mississippi	8 47	14.3	Nebraska	7 58	32.8
Vermont	23 18	32.5	Louisiana	9 54	16.0	California	18 99	27.9
Massachusetts	22·94	31.6	Texas	9 52	18.0	Oregon	16 85	23.8
Rhode Island	22 98	30.2	Arkansas	10 07	19.7	Nevada	17 60	24.6
Connecticut	20 94	30.1	Tennessee	8 92	20.6	Colorado	17 77	26.7
New York	18 39	29.8	West Virginia	11 80	23.4	Arizona	16 73	20.9
New Jersey	17 83	30.5	Kentucky	9 97	23.8	Dakota	8 67	25.4
Pennsylvania	17 16	31.0	Ohio	13 16	30.9	Idaho	18 28	23.2
Delaware	9 05	19.2	Michigan	13 16	28.9	Montana	20 12	26.2
Maryland	11 88	24.1	Indiana	10 84	28.9	New Mexico	15 04	19.9
Virginia	8 46	16.8	Illinois	9 38	26.7	Utah	13 54	19.7
North Carolina	7 15	12.2	Wisconsin	11 04	27.2	Washington	17 50	24.3
South Carolina	6 19	9.4	Minnesota	10 86	29.6			
Georgia	6 81	10.5	Iowa	8 63	30.9	Average	9 47	24.1
Florida	7 22	9.7	Missouri	8 94	27.4			

EXPLANATION.

This map shows the average value per acre, by States, for a period of ten years. The States are placed in five groups, each group having a certain range of value, and distinguished both by mechanical drawing and by seperate tints. As a prominent element in value, the yield per acre is shown in each State, in plain figures, in circles differentiated as in the illustration of value per acre.

YIELD PER ACRE

Bushels	Tints	States
30.1 to 32.8	●	11
26.2 to 29.8	●	11
23.2 to 25.4	●	8
16.0 to 20.9	●	9
9.4 to 14.3	●	6
		45

COLOR KEY.

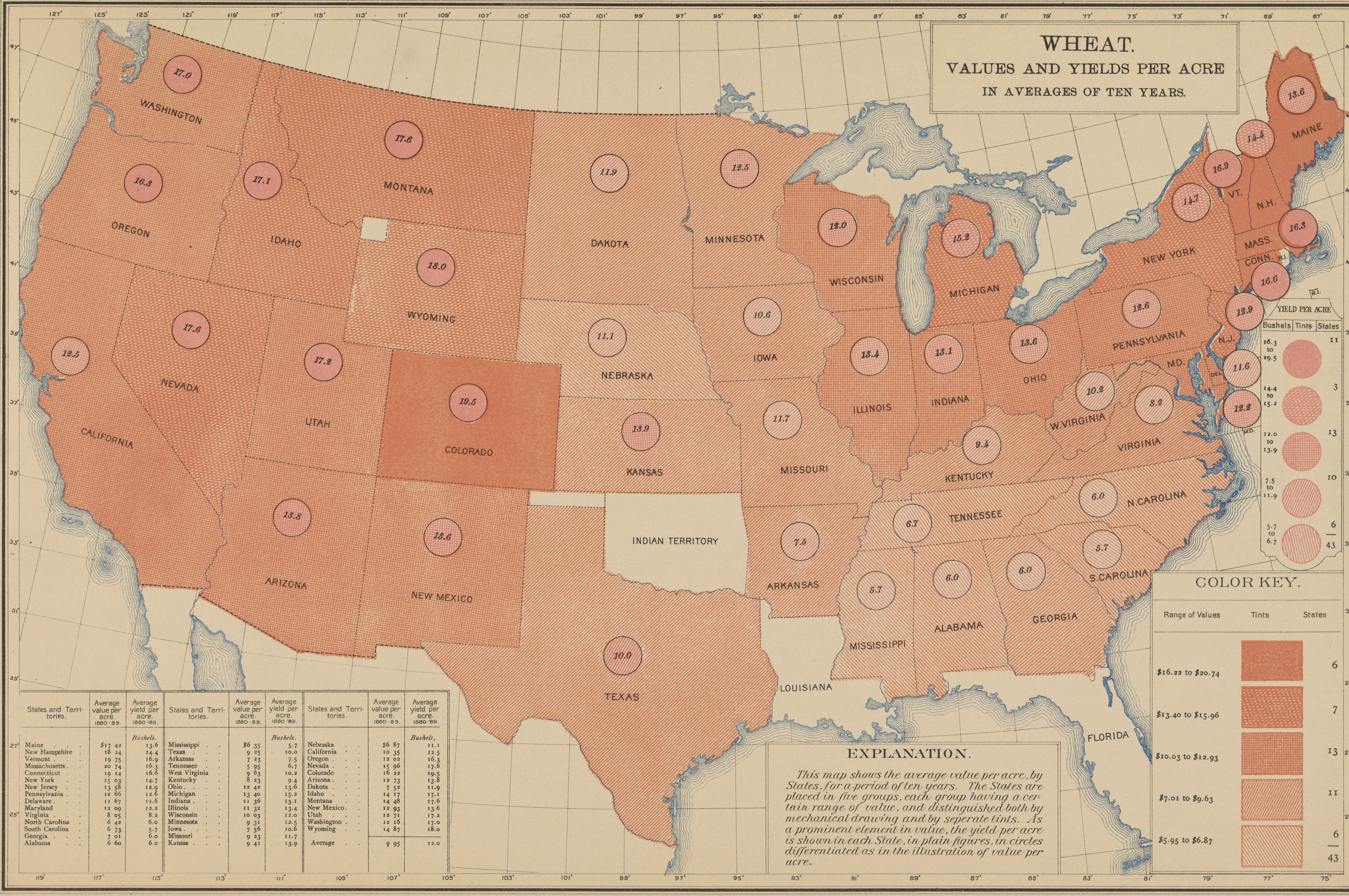
Range of Values	Tints	States
$20.12 to $24.32	🟩	7
$15.04 to $18.99	▩	11
$10.07 to $13.54	▦	9
$8.46 to $9.97	▨	11
$6.19 to $7.90	▧	7
		45

BELL LITHO.CO, WASH'N, D.C.

WHEAT.

VALUES AND YIELDS PER ACRE

IN AVERAGES OF TEN YEARS.



States and Territories.	Average value per acre. 1880-89.	Average yield per acre. 1880-'89.	States and Territories.	Average value per acre. 1880-89.	Average yield per acre. 1880-'89.	States and Territories.	Average value per acre. 1880-89.	Average yield per acre. 1880-'89.
		Bushels.			*Bushels.*			*Bushels.*
Maine	$17 42	13.6	Mississippi	$6 35	5.7	Nebraska	$6 87	11.1
New Hampshire	18 24	14.4	Texas	9 25	10.0	California	10 35	12.5
Vermont	19 75	16.9	Arkansas	7 23	7.5	Oregon	12 02	16.3
Massachusetts	20 74	16.3	Tennessee	5 95	6.7	Nevada	15 96	17.6
Connecticut	19 14	16.6	West Virginia	9 63	10.2	Colorado	16 22	19.5
New York	15 03	14.7	Kentucky	8 23	9.4	Arizona	12 73	13.8
New Jersey	13 58	12.9	Ohio	12 42	13.6	Dakota	7 52	11.9
Pennsylvania	12 66	12.6	Michigan	13 40	15.2	Idaho	14 17	17.1
Delaware	11 67	11.6	Indiana	11 36	13.1	Montana	14 48	17.6
Maryland	12 09	12.2	Illinois	11 32	13.4	New Mexico	12 93	13.6
Virginia	8 05	8.2	Wisconsin	10 03	12.0	Utah	12 71	17.2
North Carolina	6 42	6.0	Minnesota	9 31	12.5	Washington	12 16	17.0
South Carolina	6 73	5.7	Iowa	7 56	10.6	Wyoming	14 87	18.0
Georgia	7 01	6.0	Missouri	9 23	11.7			
Alabama	6 60	6.0	Kansas	9 41	13.9	Average	9 95	12.0

EXPLANATION.

This map shows the average value per acre, by States, for a period of ten years. The States are placed in five groups, each group having a certain range of value, and distinguished both by mechanical drawing and by seperate tints. As a prominent element in value, the yield per acre is shown in each State, in plain figures, in circles differentiated as in the illustration of value per acre.

COLOR KEY.

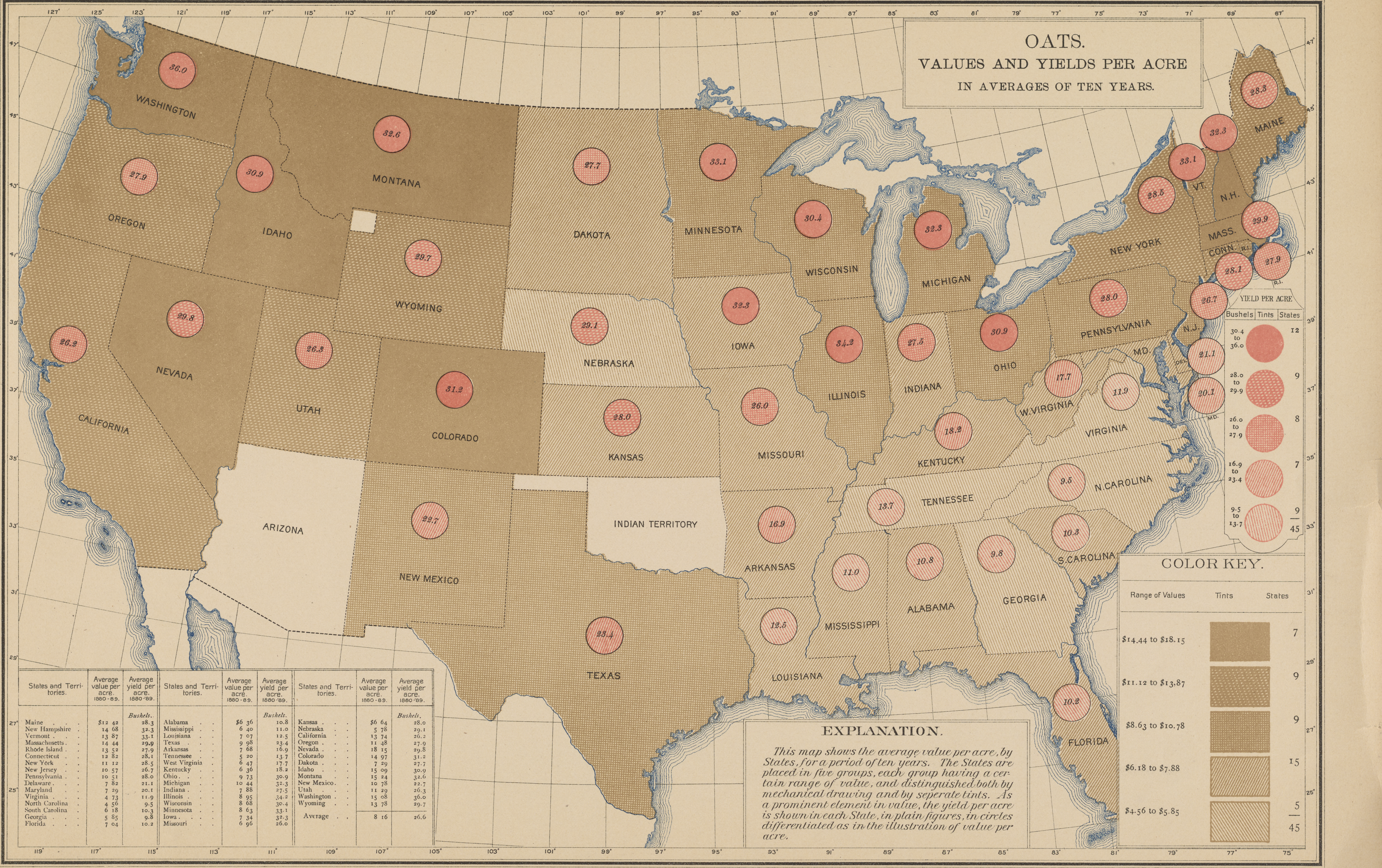
Range of Values	Tints	States
$16.22 to $20.74	▨	6
$13.40 to $15.96	▨	7
$10.03 to $12.93	▨	13
$7.01 to $9.63	▨	11
$5.95 to $6.87	▨	6
		43

BELL LITHO.CO. WASH'N, D.C.

OATS.

VALUES AND YIELDS PER ACRE

IN AVERAGES OF TEN YEARS.



YIELD PER ACRE

Bushels	Tints	States
30.4 to 36.0	●	12
28.0 to 29.9	◍	9
26.0 to 27.9	◍	8
16.9 to 23.4	◍	7
9.5 to 13.7	◌	9
		45

States and Territories.	Average value per acre. 1880-89.	Average yield per acre. 1880-'89.	States and Territories.	Average value per acre. 1880-89.	Average yield per acre. 1880-'89.	States and Territories.	Average value per acre. 1880-89.	Average yield per acre. 1880-'89.
		Bushels.			*Bushels.*			*Bushels.*
Maine	$12 42	28.3	Alabama	$6 36	10.8	Kansas	$6 64	28.0
New Hampshire	14 68	32.3	Mississippi	6 40	11.0	Nebraska	5 78	29.1
Vermont	13 87	33.1	Louisiana	7 07	12.5	California	13 74	26.2
Massachusetts	14 44	29.9	Texas	9 98	23.4	Oregon	11 48	27.9
Rhode Island	13 52	27.9	Arkansas	7 68	16.9	Nevada	18 15	29.8
Connecticut	12 82	28.1	Tennessee	5 20	13.7	Colorado	14 97	31.2
New York	11 12	28.5	West Virginia	6 47	17.7	Dakota	7 29	27.7
New Jersey	10 57	26.7	Kentucky	6 36	18.2	Idaho	15 09	30.9
Pennsylvania	10 51	28.0	Ohio	9 73	30.9	Montana	15 24	32.6
Delaware	7 82	21.1	Michigan	10 44	32.3	New Mexico	10 78	22.7
Maryland	7 29	20.1	Indiana	7 88	27.5	Utah	11 29	26.3
Virginia	4 73	11.9	Illinois	8 95	34.2	Washington	15 08	36.0
North Carolina	4 56	9.5	Wisconsin	8 68	30.4	Wyoming	13 78	29.7
South Carolina	6 18	10.3	Minnesota	8 63	33.1			
Georgia	5 85	9.8	Iowa	7 34	32.3	Average	8 16	26.6
Florida	7 04	10.2	Missouri	6 96	26.0			

EXPLANATION.

This map shows the average value per acre, by States, for a period of ten years. The States are placed in five groups, each group having a certain range of value, and distinguished both by mechanical drawing and by seperate tints. As a prominent element in value, the yield per acre is shown in each State, in plain figures, in circles differentiated as in the illustration of value per acre.

COLOR KEY.

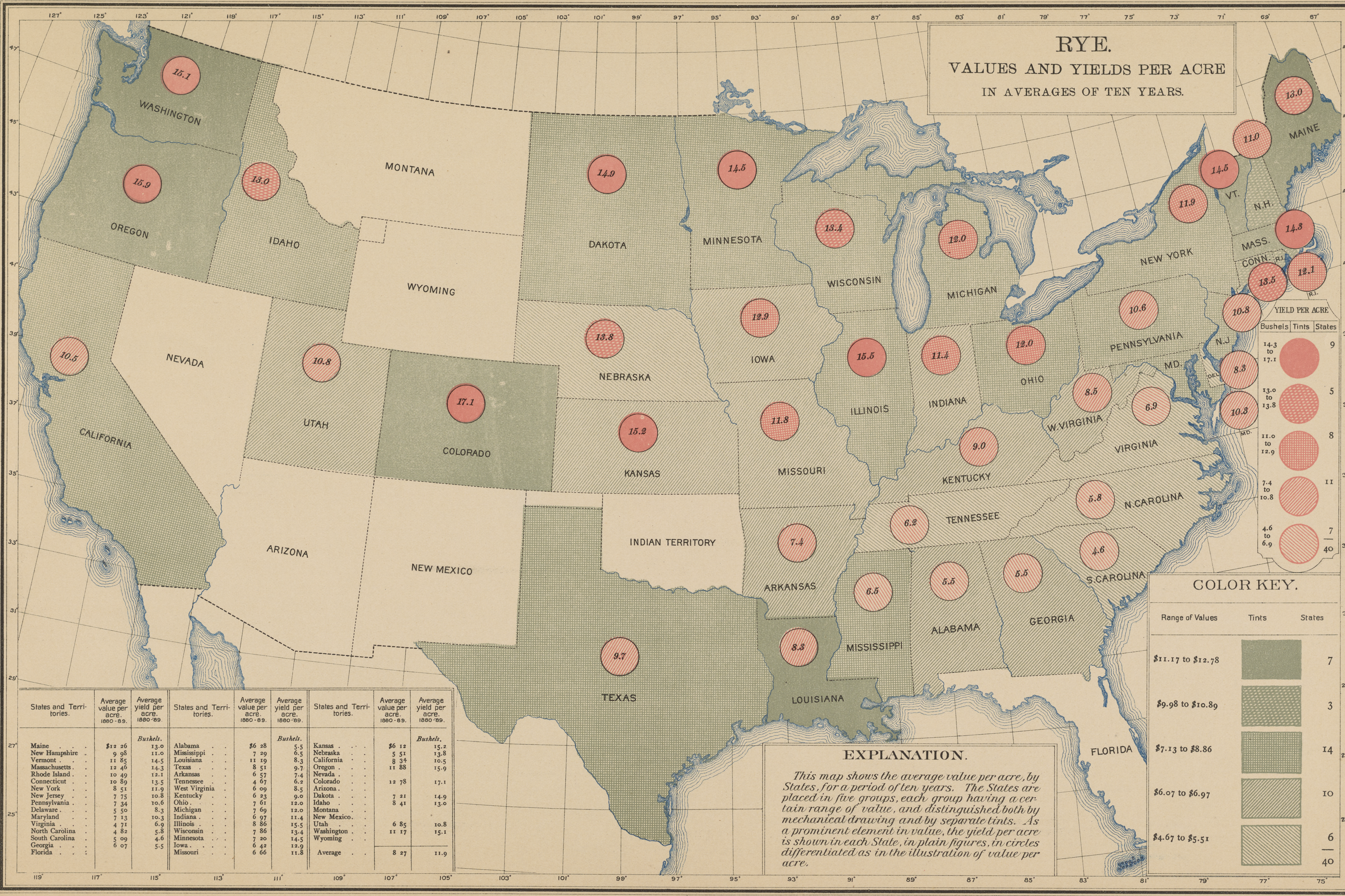
Range of Values	Tints	States
$14.44 to $18.15	■	7
$11.12 to $13,87	▩	9
$8.63 to $10.78	▦	9
$6.18 to $7.88	▨	15
$4.56 to $5.85	▧	5
		45

BELL LITHO.CO., WASH'N, D.C.

RYE.

VALUES AND YIELDS PER ACRE

IN AVERAGES OF TEN YEARS.



YIELD PER ACRE

Bushels	Tints	States
14.3 to 17.1	●	9
13.0 to 13.8	▩	5
11.0 to 12.9	▦	8
7.4 to 10.8	▨	11
4.6 to 6.9	▧	7
		40

COLOR KEY.

Range of Values	Tints	States
$11.17 to $12.78	■	7
$9.98 to $10.89	▩	3
$7.13 to $8.86	▦	14
$6.07 to $6.97	▨	10
$4.67 to $5.51	▧	6
		40

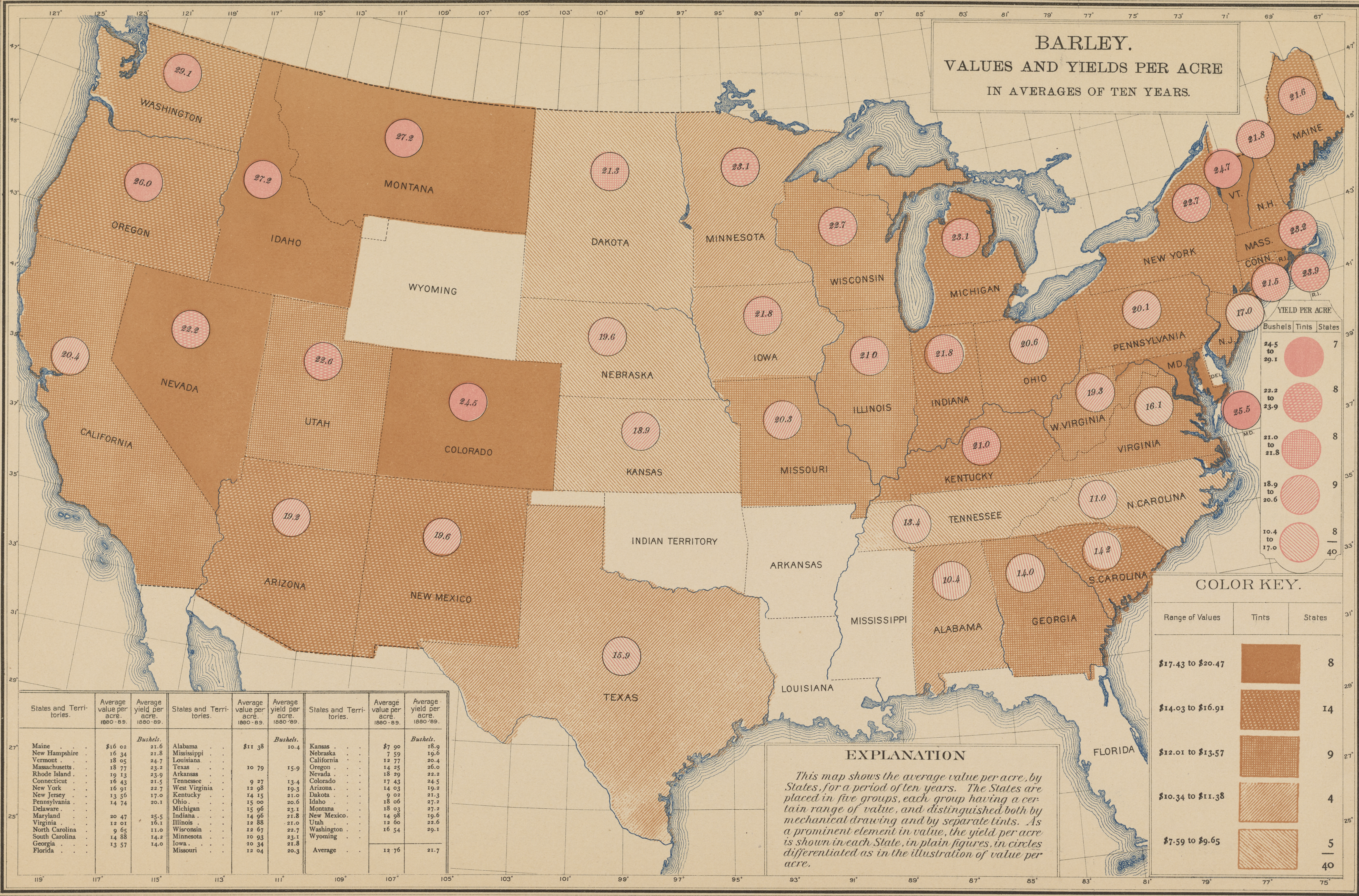
States and Territories.	Average value per acre. 1880-89.	Average yield per acre. 1880-'89.	States and Territories.	Average value per acre. 1880-89.	Average yield per acre. 1880-'89.	States and Territories.	Average value per acre. 1880-89.	Average yield per acre. 1880-'89.
		Bushels.			*Bushels.*			*Bushels.*
Maine	$12 26	13.0	Alabama	$6 28	5.5	Kansas	$6 12	15.2
New Hampshire	9 98	11.0	Mississippi	7 29	6.5	Nebraska	5 51	13.8
Vermont	11 85	14.5	Louisiana	11 19	8.3	California	8 34	10.5
Massachusetts	12 46	14.3	Texas	8 51	9.7	Oregon	11 88	15.9
Rhode Island	10 49	12.1	Arkansas	6 57	7.4	Nevada		
Connecticut	10 89	13.5	Tennessee	4 67	6.2	Colorado	12 78	17.1
New York	8 51	11.9	West Virginia	6 09	8.5	Arizona		
New Jersey	7 75	10.8	Kentucky	6 23	9.0	Dakota	7 21	14.9
Pennsylvania	7 34	10.6	Ohio	7 61	12.0	Idaho	8 41	13.0
Delaware	5 50	8.3	Michigan	7 69	12.0	Montana		
Maryland	7 13	10.3	Indiana	6 97	11.4	New Mexico		
Virginia	4 71	6.9	Illinois	8 86	15.5	Utah	6 85	10.8
North Carolina	4 82	5.8	Wisconsin	7 86	13.4	Washington	11 17	15.1
South Carolina	5 09	4.6	Minnesota	7 20	14.5	Wyoming		
Georgia	6 07	5.5	Iowa	6 42	12.9			
Florida			Missouri	6 66	11.8	Average	8 27	11.9

EXPLANATION.

This map shows the average value per acre, by States, for a period of ten years. The States are placed in five groups, each group having a certain range of value, and distinguished both by mechanical drawing and by separate tints. As a prominent element in value, the yield per acre is shown in each State, in plain figures, in circles differentiated as in the illustration of value per acre.

BELL LITHO. CO., WASH'N, D.C.

BARLEY.
VALUES AND YIELDS PER ACRE
IN AVERAGES OF TEN YEARS.



YIELD PER ACRE		
Bushels	Tints	States
24.5 to 29.1	●	7
22.2 to 23.9	●	8
21.0 to 21.8	●	8
18.9 to 20.6	●	9
10.4 to 17.0	●	8
		40

COLOR KEY.

Range of Values	Tints	States
$17.43 to $20.47	▨	8
$14.03 to $16.91	▨	14
$12.01 to $13.57	▨	9
$10.34 to $11.38	▨	4
$7.59 to $9.65	▨	5
		40

States and Territories.	Average value per acre. 1880-89.	Average yield per acre. 1880-89.	States and Territories.	Average value per acre. 1880-89.	Average yield per acre. 1880-89.	States and Territories.	Average value per acre. 1880-89.	Average yield per acre. 1880-89.
		Bushels.			*Bushels.*			*Bushels.*
Maine	$16 02	21.6	Alabama	$11 38	10.4	Kansas	$7 90	18.9
New Hampshire	16 34	21.8	Mississippi			Nebraska	7 59	19.6
Vermont	18 05	24.7	Louisiana			California	12 77	20.4
Massachusetts	18 77	23.2	Texas	10 79	15.9	Oregon	14 25	26.0
Rhode Island	19 13	23.9	Arkansas			Nevada	18 29	22.2
Connecticut	16 43	21.5	Tennessee	9 27	13.4	Colorado	17 43	24.5
New York	16 91	22.7	West Virginia	12 98	19.3	Arizona	14 03	19.2
New Jersey	13 56	17.0	Kentucky	14 15	21.0	Dakota	9 02	21.3
Pennsylvania	14 74	20.1	Ohio	15 00	20.6	Idaho	18 06	27.2
Delaware			Michigan	15 96	23.1	Montana	18 03	27.2
Maryland	20 47	25.5	Indiana	14 96	21.8	New Mexico	14 98	19.6
Virginia	12 01	16.1	Illinois	12 88	21.0	Utah	12 60	22.6
North Carolina	9 65	11.0	Wisconsin	12 67	22.7	Washington	16 54	29.1
South Carolina	14 88	14.2	Minnesota	10 93	23.1	Wyoming		
Georgia	13 57	14.0	Iowa	10 34	21.8			
Florida			Missouri	12 04	20.3	Average	12 76	21.7

EXPLANATION

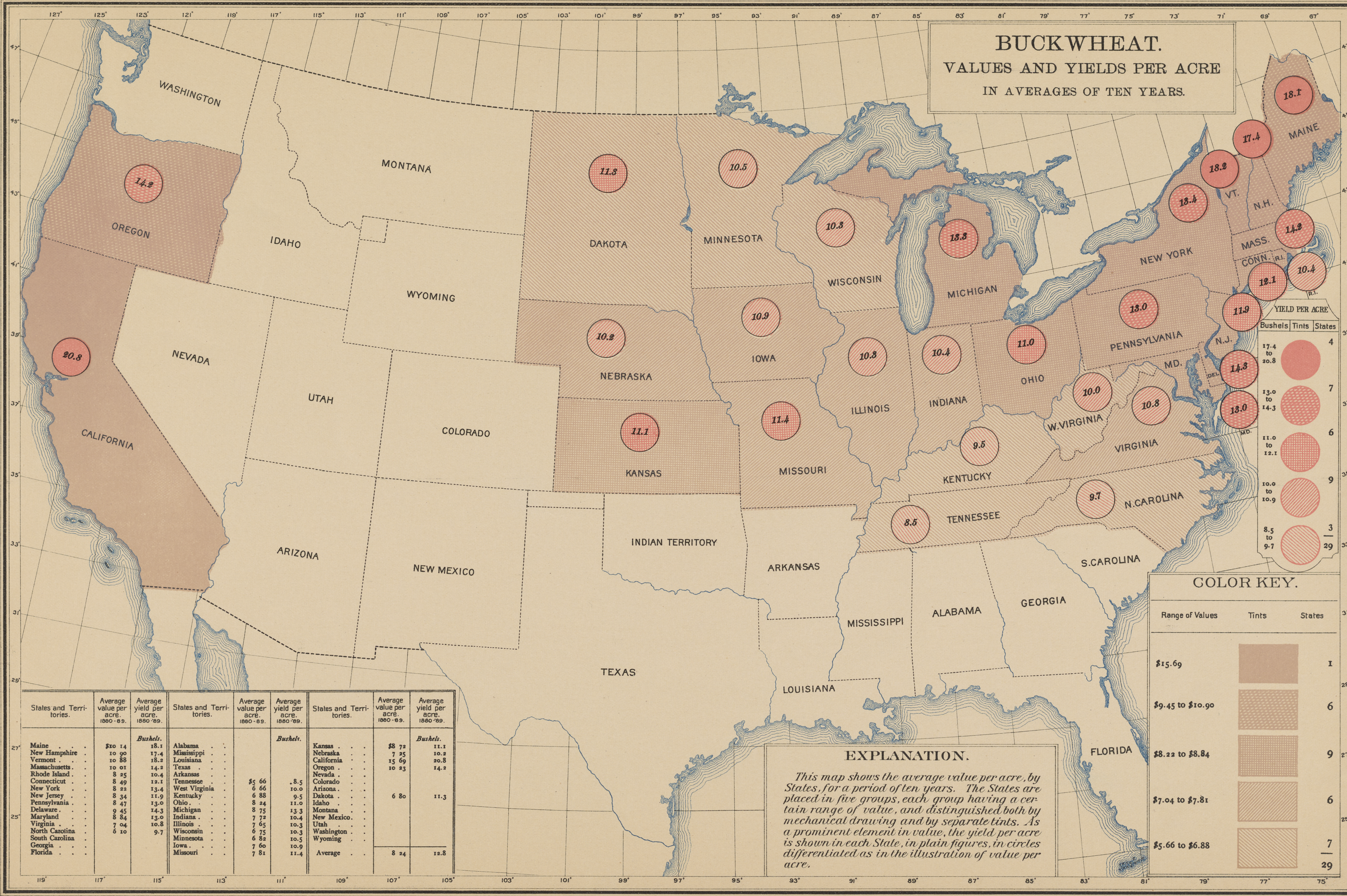
This map shows the average value per acre, by States, for a period of ten years. The States are placed in five groups, each group having a certain range of value, and distinguished both by mechanical drawing and by separate tints. As a prominent element in value, the yield per acre is shown in each State, in plain figures, in circles differentiated as in the illustration of value per acre.

BELL LITHO. CO. WASH'N, D.C.

BUCKWHEAT.

VALUES AND YIELDS PER ACRE

IN AVERAGES OF TEN YEARS.



States and Territories.	Average value per acre. 1880-89.	Average yield per acre. 1880-'89.	States and Territories.	Average value per acre. 1880-89.	Average yield per acre. 1880-'89.	States and Territories.	Average value per acre. 1880-89.	Average yield per acre. 1880-'89.
		Bushels.			*Bushels.*			*Bushels.*
Maine	$10 14	18.1	Alabama			Kansas	$8 72	11.1
New Hampshire	10 90	17.4	Mississippi			Nebraska	7 25	10.2
Vermont	10 88	18.2	Louisiana			California	15 69	20.8
Massachusetts	10 01	14.2	Texas			Oregon	10 23	14.2
Rhode Island	8 25	10.4	Arkansas			Nevada		
Connecticut	8 49	12.1	Tennessee	$5 66	8.5	Colorado		
New York	8 22	13.4	West Virginia	6 66	10.0	Arizona		
New Jersey	8 34	11.9	Kentucky	6 88	9.5	Dakota	6 80	11.3
Pennsylvania	8 47	13.0	Ohio	8 24	11.0	Idaho		
Delaware	9 45	14.3	Michigan	8 75	13.3	Montana		
Maryland	8 84	13.0	Indiana	7 72	10.4	New Mexico		
Virginia	7 04	10.8	Illinois	7 65	10.3	Utah		
North Carolina	6 10	9.7	Wisconsin	6 75	10.3	Washington		
South Carolina			Minnesota	6 82	10.5	Wyoming		
Georgia			Iowa	7 60	10.9			
Florida			Missouri	7 81	11.4	Average	8 24	12.8

EXPLANATION.

This map shows the average value per acre, by States, for a period of ten years. The States are placed in five groups, each group having a certain range of value, and distinguished both by mechanical drawing and by separate tints. As a prominent element in value, the yield per acre is shown in each State, in plain figures, in circles differentiated as in the illustration of value per acre.

YIELD PER ACRE

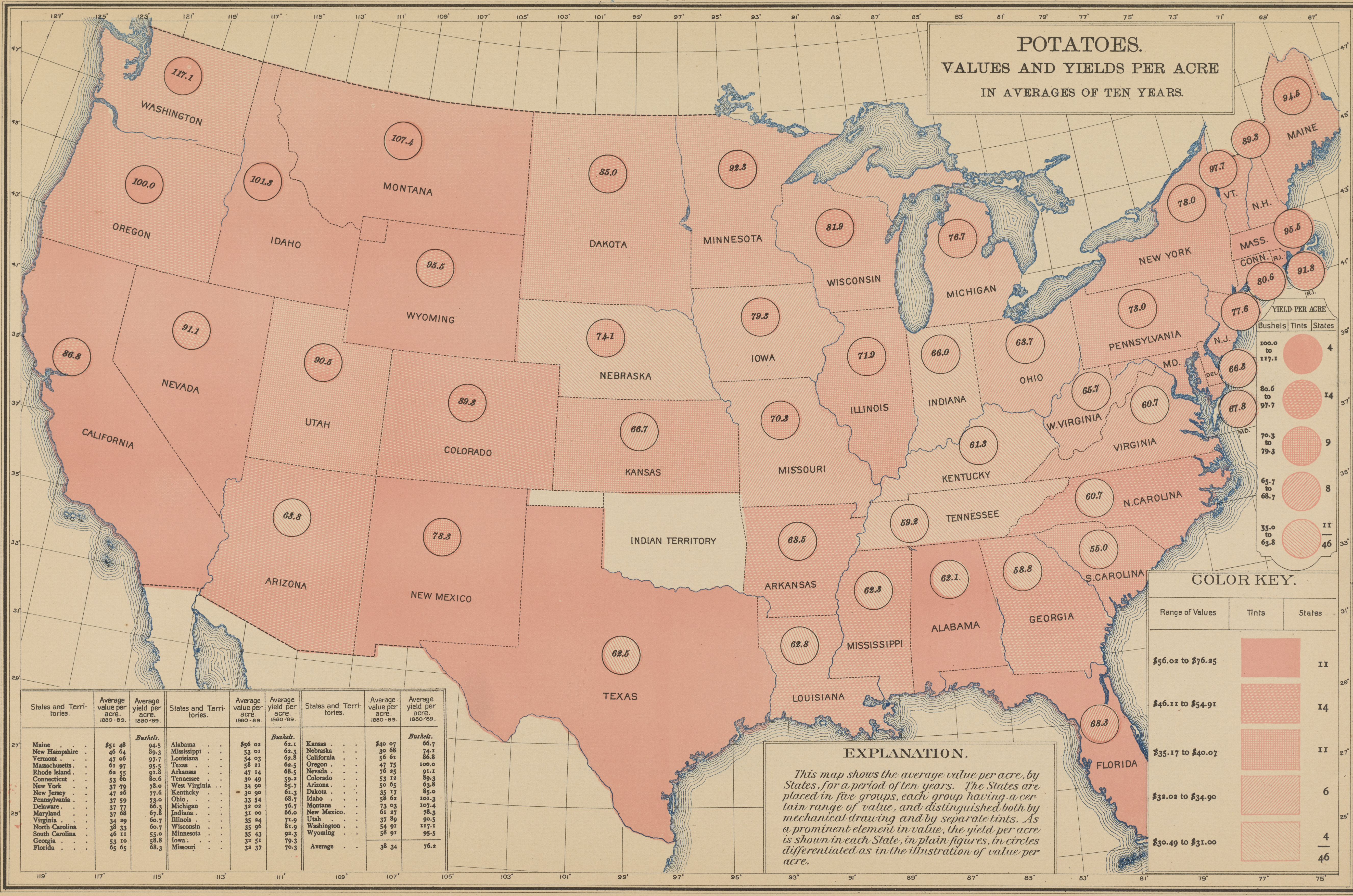
Bushels	Tints	States
17.4 to 20.8	●	4
13.0 to 14.3	▨	7
11.0 to 12.1	▦	6
10.0 to 10.9	▨	9
8.5 to 9.7	▧	3
		29

COLOR KEY.

Range of Values	Tints	States
$15.69	■	1
$9.45 to $10.90	▨	6
$8.22 to $8.84	▦	9
$7.04 to $7.81	▨	6
$5.66 to $6.88	▧	7
		29

BELL LITHO.CO., WASH'N, D.C.

POTATOES.
VALUES AND YIELDS PER ACRE
IN AVERAGES OF TEN YEARS.



YIELD PER ACRE

Bushels	Tints	States
100.0 to 117.1	●	4
80.6 to 97.7	●	14
70.3 to 79.3	●	9
65.7 to 68.7	●	8
55.0 to 63.8	●	11 — 46

COLOR KEY.

Range of Values	Tints	States
$56.02 to $76.25	■	11
$46.11 to $54.91	▩	14
$35.17 to $40.07	▦	11
$32.02 to $34.90	▨	6
$30.49 to $31.00	▧	4 — 46

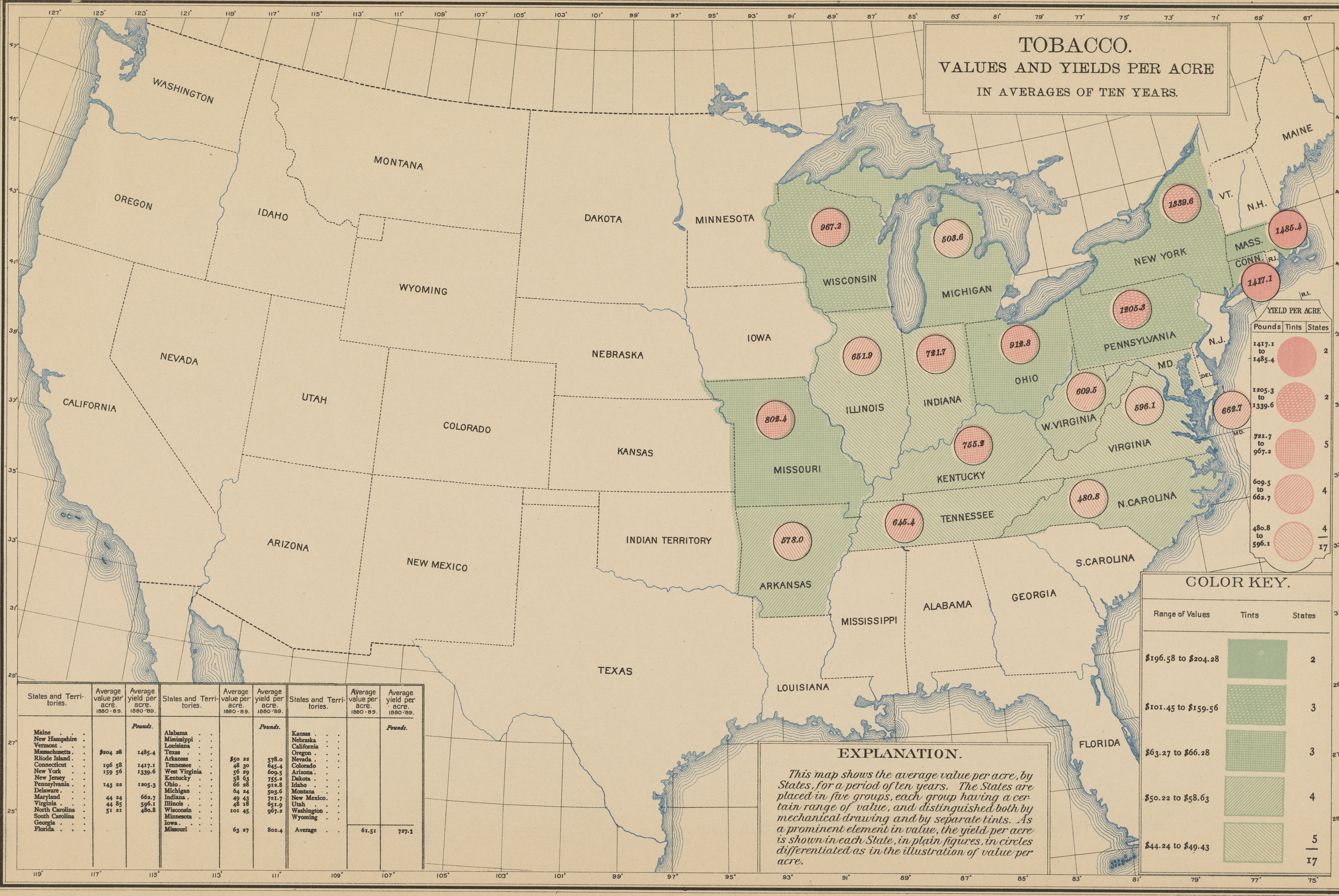
EXPLANATION.

This map shows the average value per acre, by States, for a period of ten years. The States are placed in five groups, each group having a certain range of value, and distinguished both by mechanical drawing and by separate tints. As a prominent element in value, the yield per acre is shown in each State, in plain figures, in circles differentiated as in the illustration of value per acre.

States and Territories.	Average value per acre. 1880-89.	Average yield per acre. 1880-'89.	States and Territories.	Average value per acre. 1880-89.	Average yield per acre. 1880-'89.	States and Territories.	Average value per acre. 1880-89.	Average yield per acre. 1880-'89.
		Bushels.			*Bushels.*			*Bushels.*
Maine	$51 48	94.5	Alabama	$56 02	62.1	Kansas	$40 07	66.7
New Hampshire	46 64	89.3	Mississippi	53 01	62.3	Nebraska	30 68	74.1
Vermont	47 06	97.7	Louisiana	54 03	62.8	California	56 61	86.8
Massachusetts	61 97	95.5	Texas	58 21	62.5	Oregon	47 75	100.0
Rhode Island	62 55	91.8	Arkansas	47 14	68.5	Nevada	76 25	91.1
Connecticut	53 60	80.6	Tennessee	30 49	59.2	Colorado	53 12	89.3
New York	37 79	78.0	West Virginia	34 90	65.7	Arizona	50 65	63.8
New Jersey	47 26	77.6	Kentucky	30 90	61.3	Dakota	35 17	85.0
Pennsylvania	37 59	73.0	Ohio	33 54	68.7	Idaho	58 62	101.3
Delaware	37 77	66.3	Michigan	32 02	76.7	Montana	73 03	107.4
Maryland	37 68	67.8	Indiana	31 00	66.0	New Mexico	61 27	78.3
Virginia	34 29	60.7	Illinois	35 24	71.9	Utah	37 89	90.5
North Carolina	38 33	60.7	Wisconsin	35 96	81.9	Washington	54 91	117.1
South Carolina	46 11	55.0	Minnesota	35 43	92.3	Wyoming	58 91	95.5
Georgia	53 10	58.8	Iowa	32 51	79.3			
Florida	65 65	68.3	Missouri	32 37	70.3	Average	38 34	76.2

BELL LITHO.CO., WASH'N, D.C.

TOBACCO.
VALUES AND YIELDS PER ACRE
IN AVERAGES OF TEN YEARS.



States and Territories.	Average value per acre. 1880-89.	Average yield per acre. 1880-'89.	States and Territories.	Average value per acre. 1880-89.	Average yield per acre. 1880-'89.	States and Territories.	Average value per acre. 1880-89.	Average yield per acre. 1880-'89.
		Pounds.			*Pounds.*			*Pounds.*
Maine . . .			Alabama . .			Kansas . . .		
New Hampshire .			Mississippi . .			Nebraska . .		
Vermont . . .			Louisiana . .			California . .		
Massachusetts . .	$204 28	1485.4	Texas . . .			Oregon . . .		
Rhode Island . .			Arkansas . .	$50 22	578.0	Nevada . . .		
Connecticut . .	196 58	1417.1	Tennessee . .	48 30	645.4	Colorado . .		
New York . .	159 56	1339.6	West Virginia .	56 29	609.5	Arizona . .		
New Jersey . .			Kentucky . .	58 63	755.2	Dakota . . .		
Pennsylvania . .	143 22	1205.3	Ohio	66 28	912.8	Idaho . . .		
Delaware . . .			Michigan . .	64 24	503.6	Montana . .		
Maryland . .	44 24	662.7	Indiana . . .	49 43	721.7	New Mexico . .		
Virginia . . .	44 85	596.1	Illinois . . .	48 18	651.9	Utah . . .		
North Carolina .	51 21	480.8	Wisconsin . .	101 45	967.2	Washington . .		
South Carolina .			Minnesota . .			Wyoming . .		
Georgia . . .			Iowa					
Florida . . .			Missouri . .	63 27	802.4	Average . .	61.51	727.1

YIELD PER ACRE

Pounds	Tints	States
1417.1 to 1485.4	●	2
1205.3 to 1339.6	●	2
721.7 to 967.2	●	5
609.5 to 662.7	●	4
480.8 to 596.1	●	4
		17

EXPLANATION.

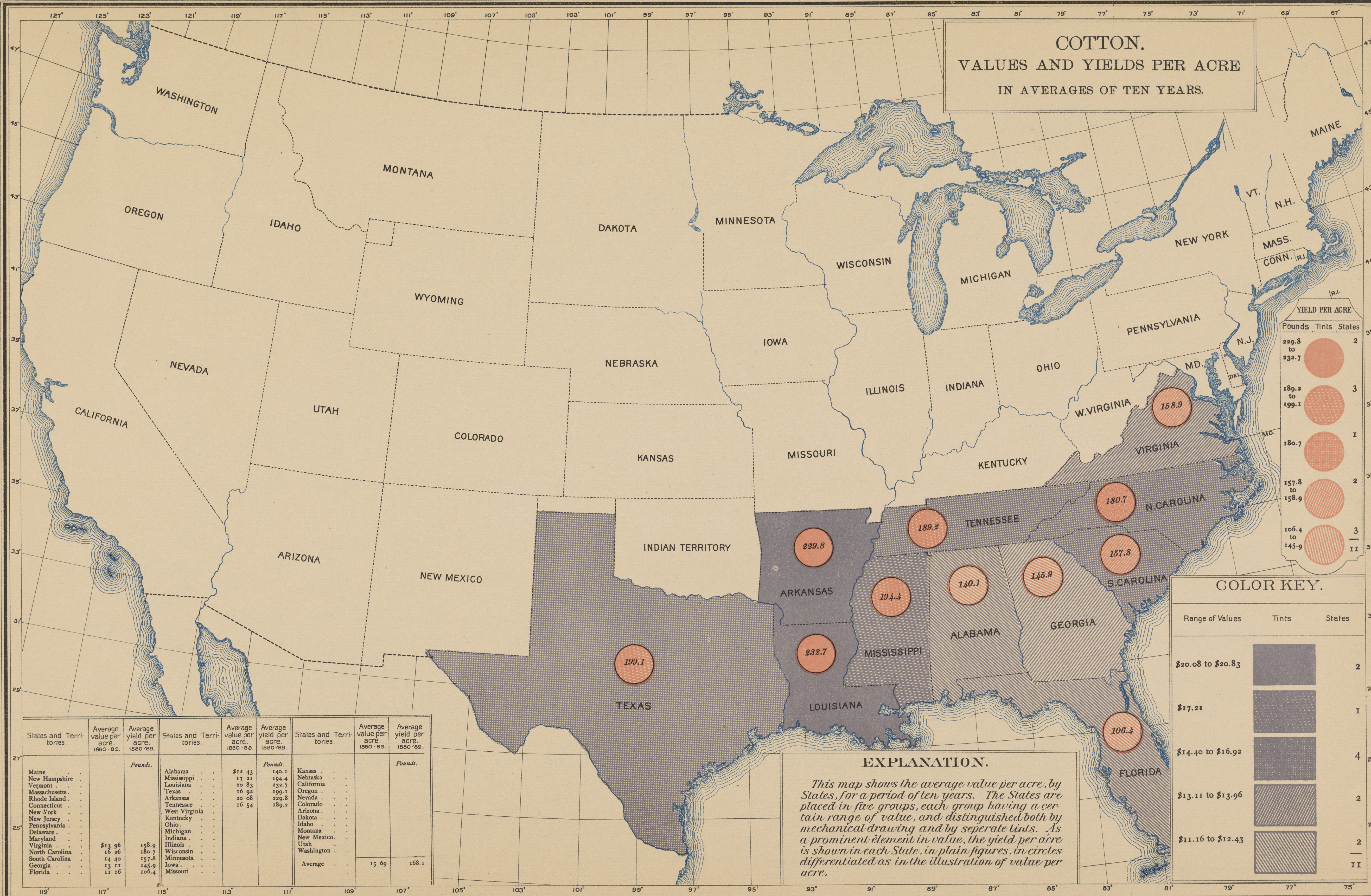
This map shows the average value per acre, by States, for a period of ten years. The States are placed in five groups, each group having a certain range of value, and distinguished both by mechanical drawing and by separate tints. As a prominent element in value, the yield per acre is shown in each State, in plain figures, in circles differentiated as in the illustration of value per acre.

COLOR KEY.

Range of Values	Tints	States
$196.58 to $204.28	🟩	2
$101.45 to $159.56	▩	3
$63.27 to $66.28	▦	3
$50.22 to $58.63	▨	4
$44.24 to $49.43	▧	5
		17

BELL LITHO.CO. WASH'N D.C.

COTTON.
VALUES AND YIELDS PER ACRE
IN AVERAGES OF TEN YEARS.



YIELD PER ACRE

Pounds	Tints	States
229.8 to 232.7	●	2
189.2 to 199.1	●	3
180.7	●	1
157.8 to 158.9	●	2
106.4 to 145.9	●	3
		11

States and Territories.	Average value per acre. 1880-89.	Average yield per acre. 1880-'89.	States and Territories.	Average value per acre. 1880-89.	Average yield per acre. 1880-'89.	States and Territories.	Average value per acre. 1880-89.	Average yield per acre. 1880-'89.
		Pounds.			*Pounds.*			*Pounds.*
Maine			Alabama	$12 43	140.1	Kansas		
New Hampshire			Mississippi	17 21	194.4	Nebraska		
Vermont			Louisiana	20 83	232.7	California		
Massachusetts			Texas	16 92	199.1	Oregon		
Rhode Island			Arkansas	20 08	229.8	Nevada		
Connecticut			Tennessee	16 54	189.2	Colorado		
New York			West Virginia			Arizona		
New Jersey			Kentucky			Dakota		
Pennsylvania			Ohio			Idaho		
Delaware			Michigan			Montana		
Maryland			Indiana			New Mexico		
Virginia	$13 96	158.9	Illinois			Utah		
North Carolina	16 26	180.7	Wisconsin			Washington		
South Carolina	14 40	157.8	Minnesota					
Georgia	13 11	145.9	Iowa			Average	15 69	168.1
Florida	11 16	106.4	Missouri					

EXPLANATION.

This map shows the average value per acre, by States, for a period of ten years. The States are placed in five groups, each group having a certain range of value, and distinguished both by mechanical drawing and by seperate tints. As a prominent élement in value, the yield per acre is shown in each State, in plain figures, in circles differentiated as in the illustration of value per acre.

COLOR KEY.

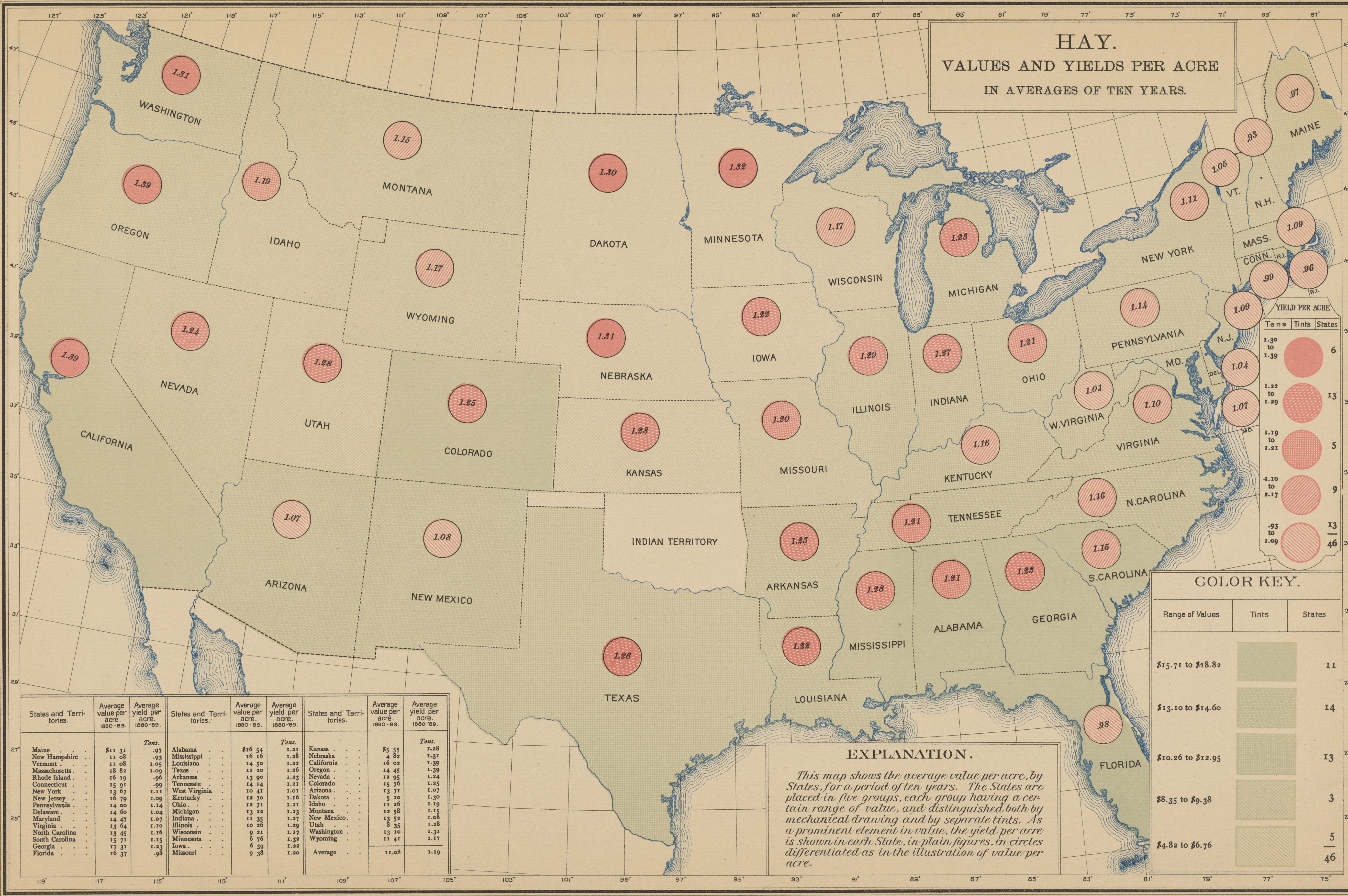
Range of Values	Tints	States
$20.08 to $20.83	■	2
$17.21	▦	1
$14.40 to $16.92	▦	4
$13.11 to $13.96	▨	2
$11.16 to $12.43	▨	2
		11

BELL LITHO.CO., WASH'N, D.C.

HAY.

VALUES AND YIELDS PER ACRE

IN AVERAGES OF TEN YEARS.



States and Territories.	Average value per acre. 1880-89.	Average yield per acre. 1880-'89.	States and Territories.	Average value per acre. 1880-89.	Average yield per acre. 1880-'89.	States and Territories.	Average value per acre. 1880-89.	Average yield per acre. 1880-'89.
		Tons.			*Tons.*			*Tons.*
Maine	$11 31	.97	Alabama	$16 54	1.21	Kansas	$5 55	1.28
New Hampshire	11 08	.93	Mississippi	16 16	1.28	Nebraska	4 82	1.31
Vermont	11 08	1.05	Louisiana	14 50	1.22	California	16 02	1.39
Massachusetts	18 82	1.09	Texas	12 20	1.26	Oregon	14 45	1.39
Rhode Island	16 19	.96	Arkansas	13 90	1.23	Nevada	12 95	1.24
Connecticut	15 91	.99	Tennessee	14 14	1.21	Colorado	15 76	1.25
New York	13 67	1.11	West Virginia	10 41	1.01	Arizona	13 71	1.07
New Jersey	16 79	1.09	Kentucky	12 70	1.16	Dakota	5 10	1.30
Pennsylvania	14 00	1.14	Ohio	12 71	1.21	Idaho	11 26	1.19
Delaware	14 60	1.04	Michigan	13 22	1.23	Montana	12 58	1.15
Maryland	14 47	1.07	Indiana	11 35	1.27	New Mexico	13 52	1.08
Virginia	13 64	1.10	Illinois	10 26	1.29	Utah	8 35	1.28
North Carolina	13 45	1.16	Wisconsin	9 21	1.17	Washington	13 10	1.31
South Carolina	15 71	1.15	Minnesota	6 76	1.32	Wyoming	11 41	1.17
Georgia	17 31	1.23	Iowa	6 39	1.22			
Florida	16 37	.98	Missouri	9 38	1.20	Average	11.08	1.19

EXPLANATION.

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YIELD PER ACRE

Tons	Tints	States
1.30 to 1.39	●	6
1.22 to 1.29	●	13
1.19 to 1.21	●	5
1.10 to 1.17	●	9
.93 to 1.09	●	13 46

COLOR KEY.

Range of Values	Tints	States
$15.71 to $18.82	▨	11
$13.10 to $14.60	▨	14
$10.26 to $12.95	▨	13
$8.35 to $9.38	▨	3
$4.82 to $6.76	▨	5 46

BELL LITHO.CO., WASH'N, D.C.